

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 (cancelled).

2 (currently amended). A cover according to claim 12, wherein said filter ~~lining~~ is compressible.

3 (currently amended). A cover according to claim 2, wherein said filter ~~lining~~ is made of a fiber material selected from the group comprising felts of vitreous synthetic fibers.

4 (currently amended). A cover according to claim 12, wherein the said top edge being of said wall and the bottom face of said filter are substantially plane, and said bottom edge being substantially plane.

5 (currently amended). A cover according to claim 12, comprising a continuous peripheral rim bordering said filter bottom edge face inside said filter ~~lining~~ opening and projecting downwardly relative thereto, said rim ~~presenting having~~ outside dimensions that are smaller than ~~said corresponding~~ inside dimensions of said opening into said chamber so as to be suitable for engaging with clearance in said opening for being received therein.

6 (currently amended). A cover according to claim 5, wherein the filter ~~lining~~ has inside dimensions that are greater than corresponding ones of said outside dimensions so as to leave annular clearance between said rim and ~~the said filter lining~~.

7 (currently amended). A cover according to claim 68, comprising localized centering means for centering the filter ~~lining~~ relative to said rim so as to ensure that said annular clearance exists.

8 (currently amended). A cover according to claim 46, comprising a continuous peripheral rim bordering said filter bottom ~~edge~~ face inside said filter ~~lining~~ opening and projecting downwardly relative thereto, said rim ~~presenting~~ having outside dimensions that are smaller than ~~said~~ corresponding inside dimensions of said opening into said chamber so as to be suitable for engaging with clearance in said opening for being received therein;

~~in that~~ the filter ~~lining~~ presents having inside dimensions that are greater than said outside dimensions so as to leave annular clearance between said rim and ~~the said filter lining;~~

~~in that~~ said downward facing circumferential flange ~~bottom edge~~ presents having blind cavities that are ~~circumferentially localized and circumferentially distributed, facing which the so~~ that contact between said downward facing circumferential flange ~~bottom edge on and~~ said filter ~~lining~~ is locally interrupted, and ~~in that~~ said cavities communicate with said annular clearance, but are closed ~~going away from~~ the periphery of said downward facing circumferential flange ~~rim~~ by the downward facing circumferential flange ~~bottom edge~~ of the cover making contact with the top face of the filter lining.

9 (currently amended). A cover according to claim 12, generally in the shape of a pot, defining internally a cavity set back upwards relative to said downward facing circumferential flange~~bottom edge~~.

10 (currently amended). A cover according to claim 12, generally in the form of a body of revolution.

11 (currently amended). A cover according to claim 12, adapted for single use, said cover having a lid ~~being~~ made of a material comprising sand agglomerated by a binder, said material being easily destroyed after use.

12 (new). A cover for inhibiting the escape of particles produced by a thermite reaction within a chamber of a crucible having a closed bottom and a circumferential wall that extends upwardly from said bottom, the top of said wall surrounding an opening into said chamber,

said cover comprising

a filter having a central opening, an inner face, a top face, a bottom face, and an outer face, and said filter bottom face being seatable atop said crucible wall with said filter opening in registration with said opening into said chamber,

and

a lid having a downward facing circumferential flange mountable on said top face of said filter for sealing said chamber to inhibit the escape of particles produced by said thermite reaction while leaving said inner face and outer face of said filter unobstructed for permitting gases produced by said thermite

reaction to exit said crucible at the top of said chamber by entering said filter through said inner face, and exiting said filter to the ambient environment through said outer face.

13 (new). A cover according to claim 12 wherein said lid is free of openings other than pores between agglomerated particles from which said lid may optionally be formed.

14 (new). A vessel cover to claim 12 wherein said lid has sufficient weight to be able, solely under the force of gravity, to prevent dislodgement of said cover by gas pressure from said thermite reaction.

15 (new). A vessel having a chamber for containing a thermite reaction, said vessel comprising

a crucible having a closed bottom and a circumferential wall extending upwardly from said bottom, said wall having a top with an upwardly facing flange,

a filter having a central opening, an inner face, a top face, a bottom face, and an outer face, and said filter bottom face being seatable on said flange of said crucible wall in registration therewith so that said filter and said wall surround said chamber,
and

a cover having a downward facing circumferential flange mountable on said top face of said filter for covering said chamber to inhibit the escape of particles produced by said thermite reaction while leaving said inner face and outer face of said filter unobstructed for permitting gases produced by said thermite reaction to exit said vessel at the top of said chamber by entering

said filter through said inner face, and exiting said filter to the ambient environment through said outer face.